

Date: Thursday, 20/11/2008 3:34:24 PM  
 User: Julie Dawson

*GR001*  
Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services		Drawing Name	: TUBE ASSEMBLY		
Job Number	: 43602			Part Number	: D3021041	
Estimate Number	: 11527			Drawing Number	: D3021 REVA	
P.O. Number	:			Project Number	: N/A	
This Issue	: 20/11/2008		S.O. No. :	Drawing Revision	: A	
Prsht Rev.	: NC			Material	:	
First Issue	: / /		Type : LARGE FAB ASSY	Due Date	: 20/12/2008	
Previous Run	: 43391			Qty:	1 Um: Each	
Written By	:					
Checked & Approved By	: <u>JUL 08.11.21</u>					
Comment	: Est. 01.10.23 New Issue SM					

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :	
1.0	M4130NT0750W049	4130 RD Tube .750 x.049W	
		Comment: Qty.: 2.1875 f(s)/Unit Total : 2.1875 f(s) 4130 Tube .750 OD x.049W Cut:- AISI 4130N tube, Ø3/4" x 0.049" wall batch: <u>M10133 x 24"</u>	<u>EL 9-1-16</u>
2.0	D301711	cap	
		Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s) cap batch: <u>B42354</u>	<u>EL 9-1-16</u>
3.0	LARGE FAB 1	LARGE FABRICATION RESOURCE 1	
		Comment: LARGE FABRICATION RESOURCE 1 1-Cut tube as per Dwg D3021  2-Drill tube as per Dwg D3021 using D8622  3--Deburr  4-Weld as per Dwg D3021 QSI004 A/R 4130 Rod Batch: <u>M15684</u>	<u>EL 9-1-16</u>
4.0	QC9	VISUAL WELDING INSPECTION	
		Comment: VISUAL WELDING INSPECTION	<u>BE 9-2-25 10</u>

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Drawing Name: TUBE ASSEMBLY

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Seq. #: Machine Or Operation:

Description :

5.0 QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

201005 (X)

6.0 POWDER COATING

POWDER COATING



M109648

Comment: POWDER COATING

Powder Coat Grey Sandtex (Ref: 4.3.5.6) as per QSI 005 4.3

START TIME: 8:30AM

OVEN TEMPERATURE: 320°F

FINISH TIME: 9:00AM

09 09-09-09 (X)

7.0 QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

8.0 PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: 6A

09/02/2009 (X)

9.0 QC21

FINAL INSPECTION/W/O RELEASE



09/02/2009 (X)

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



MF 09-09-2009

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

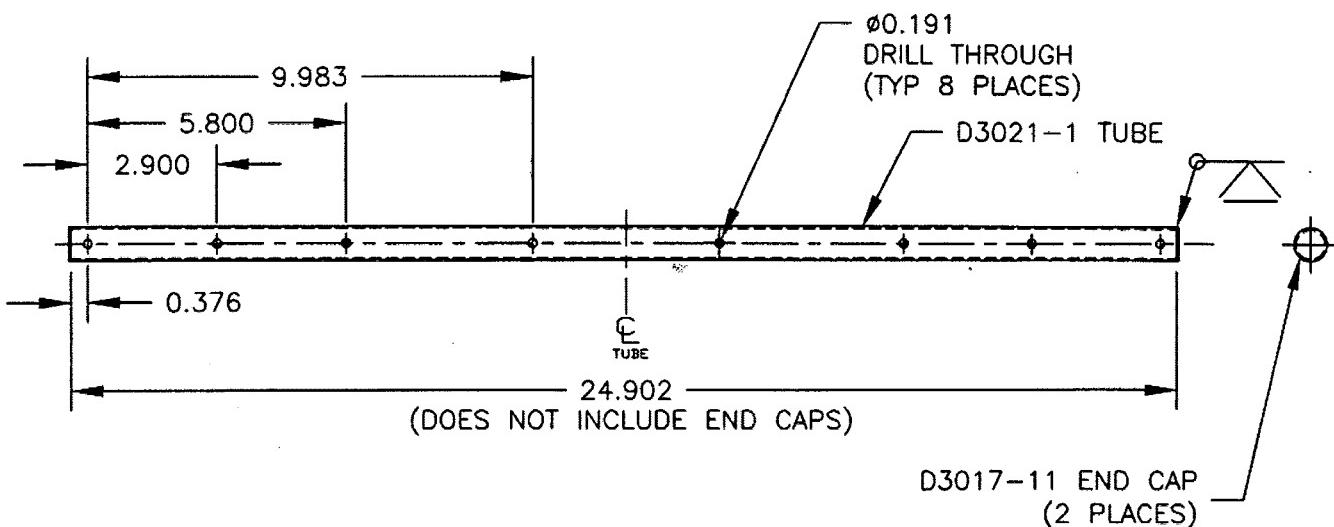
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

**DART**

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO. D3021 REV. A SHEET 1 OF 1
DATE		TITLE SCALE
01.05.18		TUBE ASSEMBLY 1:4
A	01.05.18	NEW ISSUE



D3021-041 TUBE ASSEMBLY  
(D3021-1 TUBE)

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO [Signature]

NOTES:

- 1) PART IS SYMMETRIC ABOUT CENTERLINE
- 2) MATERIAL: AISI 4130 TUBE, Ø0.75 DIA x 0.049 WALL (M4130N-T0750W049)
- 3) WELD PER DART QSI 004
- 4) FINISH: POWDER COAT GREY SANTEX (REF 4.3.5.6) PER DART QSI 005 4.3
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.

RELEASED  
01-05-309

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